partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along at least a portion of the overlapped portion.

41.(New) The process of claim 40, wherein a second beam of electromagnetic energy which is substantially annular is generated, the electromagnetic energy substantially continuous in the annular direction, the electromagnetic energy at least partially absorbable by at least one of the polymeric material and the polymeric catheter tube at a selected energy wavelength;

controllably directing the second beam of electromagnetic energy such that it converges onto the polymeric material in a bond site on the over-lapped portion circumscribing the catheter tube to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along the bond site and the immediate region thereof; and

42.(New) The process of claim 40, wherein there is a plurality of annular beams, each annular beam to be directed to a bonding location is substantially disposed about the longitudinal axis of the catheter tube.

43.(New) The process of claim 40, wherein the annular beam has a substantially uniform distribution annularly.

44.(New) The process of claim 40 wherein the polymeric material is a sheath or catheter tube.

45.(New) The process of claim 44, the polymeric material having a proximal end and a distal end, wherein a first annular beam is directed at the proximal end of the polymeric material and a second annular beam is directed at the distal end of the polymeric material.

46.(New) The process of claim 45 wherein the first annular beam is directed to the proximal end of the polymeric material at the same time that the second beam is directed to the distal end of the polymeric material.

47.(New) The process of claim 40 wherein the polymeric material forming the body is selected from a group of polymeric materials consisting of: polyesters, polyolefins, polyamides, thermoplastic polyurethanes and their copolymers.

47 48.(New) The process of claim 40 wherein the annular beam is generated and directed through the use of at least two lenses.

48 49.(New) The process of claim 40 wherein after being generated the annular beam is redirected by passing through at least one lens.

D 49 50.(New) The process of claim 40 wherein after being generated the annular beam is redirected by striking at least one mirror.

50 51.(New) The process of claim 40 wherein the energy is substantially monochromatic.

51 52.(New) The process of claim 40 wherein the at least one partially melted material is allowed to cool and solidify to form a seal or bond between the polymeric catheter tube and the polymeric material.

52 53.(New) A process for simultaneously bonding at least two polymeric materials to a catheter tube comprising the steps of:

providing a catheter tube having a longitudinal axis, the catheter tube having at least a first overlapped portion and a second overlapped portion, each overlapped portion having a polymeric material circumscribing the catheter tube;

simultaneously generating a first annular beam of electromagnetic energy that is at least partially absorbable by the polymeric material at the first overlapped portion and a second annular beam of electromagnetic energy that is at least partially absorbable by the polymeric material at the second overlapped portion, each annular beam to be directed to an overlapped portion substantially disposed about the longitudinal axis of the catheter tube;

controllably redirecting the first annular beam of electromagnetic energy such that it converges onto the polymeric material at the first overlapped portion circumscribing the catheter tube and at least partially melts the polymeric material along at least a portion of the first overlapped portion and simultaneously controllably redirecting the second annular beam of electromagnetic energy such that it converges onto the polymeric material at the second overlapped portion circumscribing the catheter tube and at least partially melts the polymeric material along at least a portion of the first overlapped portion.

54.(New) The process of claim 53 wherein the polymeric material circumscribing the catheter tube at the first and second overlapped portions is polymeric balloon material.

55.(New) The process of claim 53 wherein the previously melted polymeric materials in the first and second overlapped portions is allowed to cool and solidify to form seals or bonds between the catheter tube and the polymeric material at the first and second overlapped portions.

56.(New) A process for bonding at least one polymeric material to a polymeric catheter tube having a longitudinal axis extending beyond each end of the polymeric catheter tube, comprising the steps of:

over-lapping a portion of the at least one polymeric material with a portion of the polymeric catheter tube thereby creating an over-lapped portion;

generating an annular beam of electromagnetic energy such that the annular beam is disposed about the longitudinal axis of the polymeric catheter tube, the electromagnetic energy at least partially absorbable by at least one of the polymeric material and the polymeric catheter tube at a selected energy wavelength;

controllably redirecting at least a portion of the annular beam of electromagnetic energy such that it converges onto the polymeric material at the over-lapped portion circumscribing at least a portion of the polymeric catheter tube to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along at least a portion of the overlapped portion.

57.(New) The process of claim 56, wherein there is a plurality of annular beams, each annular beam to be directed to the overlapped portion is substantially disposed about the longitudinal axis of the catheter tube.

58.(New) The process of claim 56 wherein the polymeric catheter tube in the region of the overlapped portion has a circular cross-section.

59.(New) A process for sealing at least one polymeric material to a polymeric catheter tube, comprising the steps of:

over-lapping a portion of the at least one polymeric material with a portion of the polymeric catheter tube thereby creating an over-lapped portion, the polymeric catheter tube having a longitudinal axis;

generating a beam of electromagnetic energy which is substantially annular, the electromagnetic energy substantially undivided in the annular direction, the electromagnetic energy at least partially absorbable by at least one of the polymeric material and the polymeric catheter tube at a selected energy wavelength;

controllably redirecting the annular beam of electromagnetic energy such that it converges onto the polymeric material at the over-lapped portion circumscribing the catheter tube to at least partially melt at least one material selected from the group consisting of the polymeric material and the polymeric catheter tube along at least a portion of the overlapped portion.

60.(New) The process of claim 59, wherein the annular beam has a substantially continuous and a substantially uniform distribution annularly.

61.(New) The process of claim 59, wherein the at least one partially melted material is allowed to cool and solidify to form a seal or bond between the polymeric catheter tube and the polymeric material.

REMARKS

In the Office Action dated March 3, 2003 claims 1-13, 16, and renumbered claim 38 were allowed. The Office Action also requires the cancellation of all non-elected claims or rejoinder of non-elected claims. To fulfill this requirement, Applicant herewith cancels claims 17-23 and 25-26 without prejudice or disclaimer.

New claims 40-61 have been added. The new claims fall within the previously provisionally elected species A, N, S, and X. No new matter has been added.